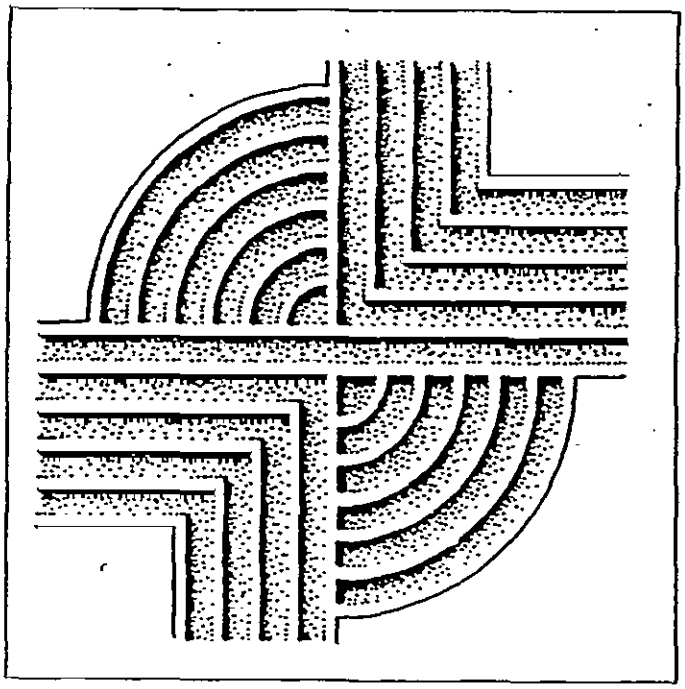
MANAGEMENT SUMMARY OF THE SECOND PHASE OF ARCHAEOLOGICAL SURVEY ON SPRING ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 43

MANAGEMENT SUMMARY OF THE SECOND PHASE OF ARCHAEOLOGICAL SURVEY ON SPRING ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA

Prepared For:
Mr. Glen McCaskey
William R. Biggs/Gilmore Associates
P.O. Box 6069
Hilton Head Island, South Carolina 29938

Prepared By:

Michael Trinkley

Chicora Research Contribution 43

Chicora Foundation, Inc.
P.O. Box 8664
Columbia, South Carolina 29202

March 9, 1990

Introduction

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Glen McCaskey, consultant to the developer of the 3500 acre (highland) Spring Island property (Callawassie Development Corporation). Spring Island is bordered to the north by the Chechessee River and the Chechessee Creek, to the east by the Chechessee and Colleton rivers, to the south by the Colleton River, and to the west by the Callawassie and Chechessee creeks. The island is separated from neighboring Callawassie Island by the Callawassie Creek, which runs north-south. The Broad River lies to the east of Spring Island (Figure 1).

Both Callawassie and Spring islands are currently owned and being developed by the same interest, the Callawassie Development Corporation. The Phase 1 development on Spring Island, which is situated on the western shore of the island, will involve a series of 36 lots, each a minimum of 5 acres in size encompassing approximately 200 acres (Glen McCaskey, personal communication 1989). This initial development, anticipated to begin early in 1990, will involve about 5.7% of the island's total high ground acreage and has been previously survey by Chicora Foundation (Trinkley 1989). These investigations were directed toward the completion of the archaeological survey on the remaining 3300 acres of Spring Island (Figure 1).

Development activities on the remainder of the island outside the original Phase 1 tract are still in the planning stage, although it is clear that additional lots, a clubhouse, a golf course, roads, utilities, and other amenities will be involved. The anticipated work will involve the clearing, grubbing, filling, and paving of the road network; the construction of below ground utilities such as water lines, storm drainage, and sewer lines; the development of individual lots; construction of a clubhouse and golf course; as well as other amenities. These activities will result in considerable land alteration with potential damage to archaeological and historical resources which may exist in the project area.

This summary is intended to provide a synopsis of the preliminary archival research and the archaeological survey of the investigations outside those conducted for the initial development tract (Trinkley 1989); it is not intended to be a final report. The results of this work, and recommendations for additional work will be more fully discussed in the final report.

Based on discussions with the developer's consultant and the Staff Archaeologist with the State Historic Preservation Office at the South Carolina Department of Archives and History, it was determined that the scope of this study would involve a total of

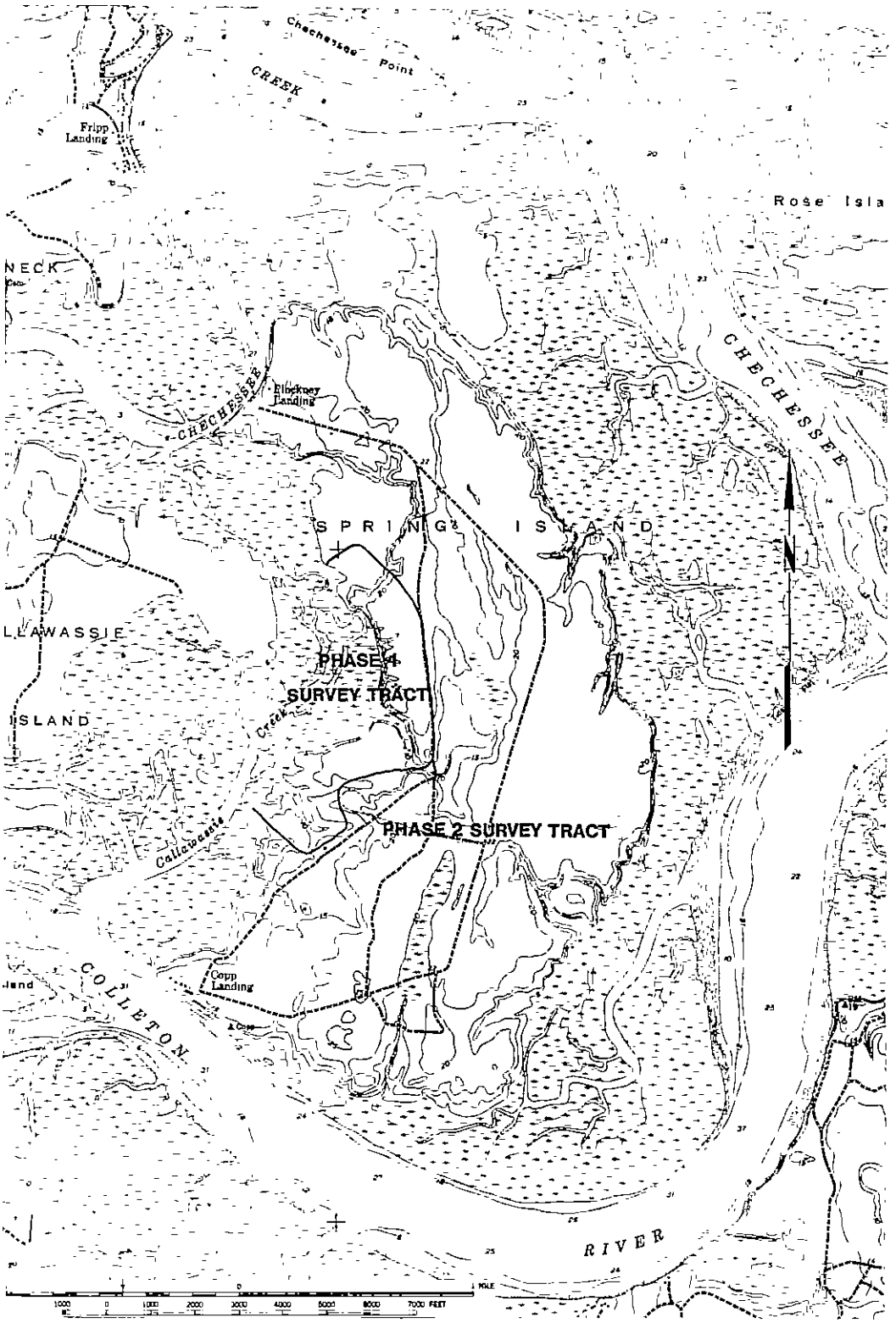


Figure 1. A portion of the Spring Island USGS map showing the project location.

six weeks of field time. Addition historical research was to be undertaken to supplement that previously compiled (Trinkley 1989). An agreement between Chicora Foundation and the developer was signed on December 29, 1989.

The historical research conducted by Chicora on this project was undertaken by the author, with assistance from Ms. Mona Grunden. Some aspects of this work are still in process. Sources consulted in this work include the South Carolina Department of Archives and History, the South Caroliniana Library, the Beaufort County RMC, the Charleston RMC, and the South Carolina Historical Society. Mr. Colin Brooker and Ms. Mona Grunden have previously contributed significant information from their research at the National Archives. Field work was conducted by Ms. Mona Grunden, Ms. Liz Pinckney, Ms. Natalie Adams and the author from January 22 through March 2, 1990 . This work required a total of 184 person hours.

Arrangements have been made to curate the collections from these investigations at The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.2. The artifacts have been cataloged as specimens ARCH 1745 through ARCH 2352. All field records will be provided to the institution on pH neutral, alkaline buffered paper and the photographic materials will be processed to archival permanence. Additional information on the processing and conservation of the artifacts may be found in a subsequent section of this management summary.

Effective Environment

Beaufort County is situated in the Lower Coastal Plain of South Carolina and is bounded to the south and southwest by the Atlantic Ocean, to the east by St. Helena Sound, to the north and northeast by the Combahee River, to the west by Jasper and Colleton counties and portions of the New and Broad rivers. The mainland primarily consists of nearly level lowlands and low ridges. Elevations range from about sea level to slightly over 100 feet above mean sea level (MSL) (Mathews et al. 1980:134-135).

The county is drained by four primarily coastal or saltwater river systems (the May, New, Broad-Pocotaligo-Coosawhatchie, and Broad rivers) and one river with a significant freshwater discharge (the Combahee River), which pays a significant role in historic rice cultivation. Because of the low topography, however, many low gradient interior drainages are present as either extensions of tidal streams and rivers or flooded bays and swales. There are many diverse wetland communities influenced by tidal inundation and river flow. Upland vegetation is primarily pine or mixed hardwoods and pine, and only 15% of the county is currently cultivated (while about 5% of the total land area is urbanized) (Mathews et al. 1980:135). Spring Island is estimated by the United States Department of Agriculture to contain 6585 acres, of which 3320 are

high ground. The total cropland on the island is approximately 1133 acres, most of which was fallow at the time of this survey.

The geology of the county is characteristic of the coastal plain, with unconsolidated water-laid beds of sands and clays up to 20 feet in thickness overlying thick beds of soft marl (Stuck 1980:3). Spring Island consists of primarily the Wando-Seabrook-Seewee soil associations which range from excessively well drained to somewhat poorly drained soils that are primarily sandy. Specifically, 19 soil series occur on the island, including Argent, Baratari, Bladen, Chisolm, Coosaw, Deloss, Eddings, Eulonia, Murad, Nemours, Polawana, Ridgeland, Rosedhu, Seabrook, Seewee, Wahee, Wando, Williman, and Younges soils (Stuck 1980:Maps 65, 75, 76, and 84). Of these, only the Chisolm, Eddings, Eulonia, Murad, Nemours, Seabrook, and Wando soils are classified as moderately well drained to well drained; the remainder are all somewhat poorly drained to poorly drained. These well drained soils, however, account for approximately 55% of the upland acreage on the island.The field investigations, therefore, tended to emphasize the better drained soils.

On the Spring Island Phase 1 tract the elevations range from 7 to 22 feet with a bank about 2 to 8 feet high separating the island from the Callawassie Creek marsh. Vegetation includes forests of live oak, pine, hickory, and sweet gum dominating the area, although fallow agricultural fields, and fields of second growth pine are also present. Nowhere in the survey area was ground visibility greater than 50% and typically visibility ranged from 0 to 10%.

Background Research

This project involved historical and archival research for Spring Island at a level appropriate for a survey study, and this work will be detailed in the final report. Some preliminary background for the island is provided by Trinkley (1989) from the Phase 1 study. General accounts of Beaufort area history are presented by Dabbs (1983), Johnson (1969), Trinkley (1986, 1987, 1988, and 1989), and Woofter (1930), while sources such as Pearson (1906) provide additional primary source documentation for the area. McGuire (1984) provides a detailed account of land ownership in the postbellum period. These sources should be consulted for additional information general to the Beaufort District.

Spring Island has been previously surveyed at a reconnaissance level by Lepionka (1986), although this report has not been accepted by the State Historic Preservation Office to satisfy compliance requirements of the development (letter from Dr. Charles Lee, State Historic Preservation Officer to Mr. R.L. Powell, Davis and Floyd Engineers, dated June 24, 1986). Lepionka did identify 65 sites (several with multiple loci) within the boundaries of this second survey area. None of the materials resulting from this

previous investigation had been curated prior to these investigations by Chicora, although some materials (including artifacts from 36 sites and copies of field notes from 77 sites (including some sites within the Phase 1 survey) were provided to Chicora. Unfortunately, these materials were not released by Lepionka until the conclusion of our project and it was not possible to utilize the field notes to relocate sites. At the present time we have received artifacts from 11 sites without field notes, and field notes for 48 sites without any accompanying artifacts. No photographic documentation of Lepionka's excavations is available and we presume that the original field notes are still in his possession. The materials which have been released to Chicora are being permanently curated by The Environmental and Historical Museum of Hilton Head Island as Accession Number 1990.2.

Chicora has chosen to incorporate Lepionka's data into this study in only those cases where we have either the field notes or the artifacts. In those cases where no artifacts are available, the reader may wish to refer to Lepionka's manuscript survey report for additional information (Lepionka 1986). The present study has found significant spatial deviations between the originally recorded sites and those identified on the basis of this survey. With the assistance of Mr. Keith Derting, South Carolina Institute of Archaeology and Anthropology, we have submitted corrected site forms and have renumbered some of the previously identified sites. This work will be discussed in greater detail in the final report.

Field Methods

The typical methodology for a compliance survey of a tract such as Spring Island is to establish a systematic intensive survey methodology which examines the entire acreage for archaeological and historical resources. Such an approach, because of the size of Spring Island, the vegetation, and its documented prehistoric and historic significance (see Trinkley 1989), would be extremely labor and cost intensive.

The situation on Spring Island, however, is somewhat different since a reconnaissance survey of the island has been previously conducted (Lepionka 1986). While this reconnaissance survey has several times been rejected by the State Historic Preservation Office as inadequate for compliance purposes, Chicora felt that it provided a starting point for these investigations. Chicora's Phase 1 survey on Spring Island revealed that while the previously conducted reconnaissance survey has serious flaws in the areas of site boundary determinations and site assessments, only a few sites in addition to those previously recorded were identified.

In addition, Chicora's Phase 1 survey of the island (Trinkley 1989) provided the intensive survey data necessary to establish a site predictive model on which to base additional investigations on Spring Island. This resulted in the ability to eliminate certain

areas on the island from additional intensive survey investigations and emphasize survey in those areas expected to produce a high probability of human occupation.

Chicora met with Dr. Patricia Cridlebaugh, Staff Archaeologist with the South Carolina State Preservation Office and discussed these issues and the development of a research plan to complete the archaeological survey of Spring Island. The State Historic Preservation Office agreed that combining the previous reconnaissance survey (Lepionka 1986) with the intensive Phase 1 survey (Trinkley 1989) did justify modifying the survey techniques for the remaining acreage on Spring Island.

As a result, rather than proposing an intensive survey of the entire Phase 2 tract on Spring Island, Chicora proposed three levels of additional investigation. The first would be sufficient shovel or auger testing to adequately determine site boundaries and site eligibility of the sites within the Phase 2 tract previously identified by Lepionka. The second phase would be some limited intensive survey in areas which, based on the Phase 1 survey, are thought to exhibit a high potential for the discovery of additional archaeological resources. The third level would involve some limited archaeological testing of the Edward's Site (38BU1) in order to allow the complete architectural documentation of the standing tabby structures.

These plans were put into effect with no significant variations. Sixty-six of Lepionka's previously recorded sites were searched for, with 64 sites actually reidentified (one site was found to be inundated and the other could not be relocated). In addition, eight new sites were recorded. The total number of sites within this second phase of survey, therefore, is 74. If the 14 previously recorded sites for the Phase 1 tract are added, this beings the total number of sites on Spring Island to 88 (or 86 if Lepionka's two sites not relocated during this survey are excluded).

Typical field procedures involved relocating the sites based on the available site forms and 1"=400' mapping provided by the client. This process was often more complex than might be expected given the variation in surface visibility between Lepionka's 1985 survey and that in 1990, five years later. In addition, Lepionka's site forms were not completed until 1986, a year after the completion of the field work. As a result, we identified occasional problems in site locations.

Once the approximate site location was determined, the area was subjected to shovel tests with all materials screened through 1/4-inch mesh. The test interval varied, depending on site size and surface visibility, from 5 foot intervals to 200 foot intervals. These investigations, however, excavated a total of 1694 shovel tests at the 71 recovered sites. These shovel tests were used to

establish boundaries which were transferred, in the field, to the 1'=400' development topographic maps. Information at each site was also collected to allow the completion of a South Carolina Institute of Archaeology and Anthropology state site form. Photographs were taken as necessary to document archaeological or architectural features. Notations on soils, middens, and recovered materials were made on Shovel Test Logs. If possible, small surface grab collections were made augment the shovel test data.

The identification of new sites incorporated minimal additional survey and emphasized the examination of areas with a high potential for archaeological remains. Because the time required to relocate the original sites was greater than anticipated, it was not possible to allocate as much time to the examination of high potential areas as intended. Although it is likely that there remains unidentified interior sites on Spring Island, we feel confident that the major sites have been recorded.

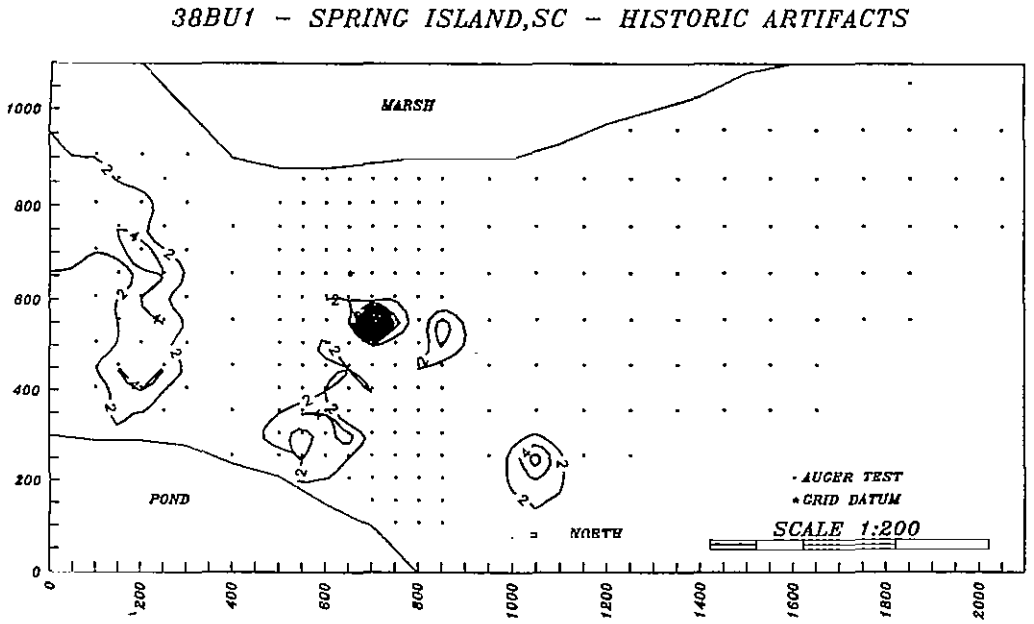
Investigations at 38BU1, which consists of the Edwards' plantation complex, included an auger survey using intervals of 100 feet to cover the northern and southern thirds of the site and an interval of 50 feet to cover the central section (in the vicinity of the standing tabby ruins). The results of this survey have been incorporated into computer density maps of the site (Figure 2). A series of five 5-foot units were excavated at the site in order to further investigate architectural and archaeological features. This work succeeded in allowing a better understanding of temporal periods, building functions, and construction elements.

Architectural investigations by Mr. Colin Brooker included plan drawings of three standing tenant houses (38BU793, 38BU803/1213 and 38BU1212), examination of four isolated tabby structures (at sites 38BU773 and 38BU1), and the detailed architectural recordation of 38BU1. The results of this work will be incorporated into Chicora's final report.

Reference to Lepionka's report (Lepionka 1986) will reveal that he tended to lump a number of discrete site areas or loci together, assigning a single site number. In some cases such sites are separated by considerable distances, while in other cases the loci joined together represent distinct temporal periods. While this practice does reduce the number of sites subject to compliance review, it tends to blur significant differences between the various loci. We have chosen to separate several of Lepionka's sites, coordinating these changes with the South Carolina Institute of Archaeology and Anthropology, which maintains the permanent state site files.

Laboratory Analysis

The cleaning and cataloging of artifacts was conducted in Columbia at the Chicora Foundation laboratory from February 17



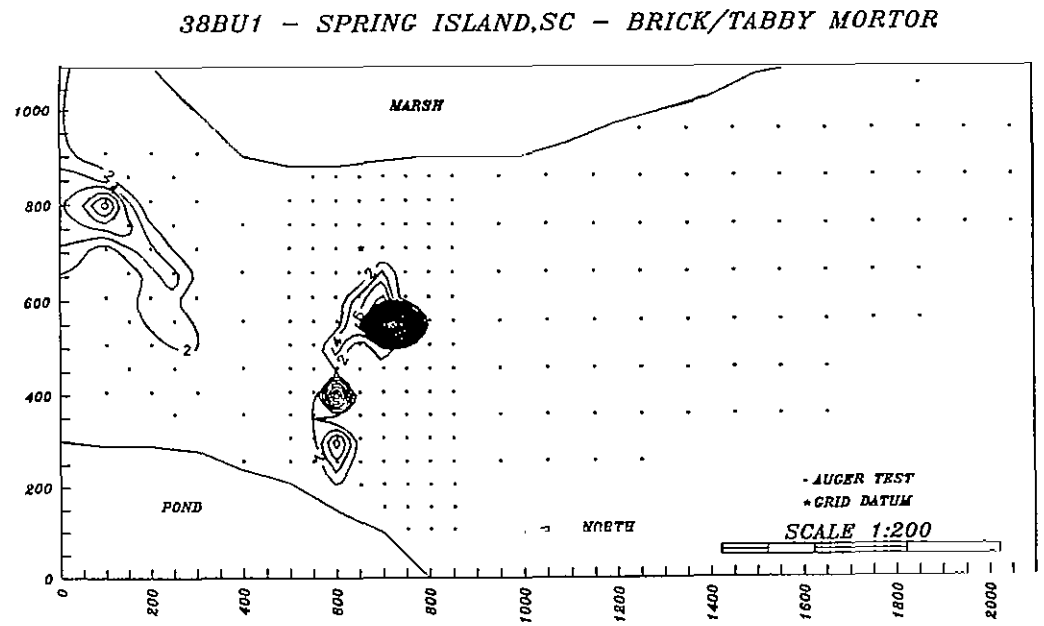


Figure 2. Computer density map of historic artifacts at 38BU1.

through March 19, 1990. Cataloging has used the format established by The Environmental and Historical Museum of Hilton Head Island. The collections are curated under Accession Number 1990.2 and specimen numbers ARCH 1745 through ARCH 2352. Artifact conservation has begun on ferrous artifacts as required by professional curation practices. Site forms will be filed with the South Carolina Institute of Archaeology and Anthropology, with copies provided to the State Historic Preservation Office and the developer's consultant. Field notes and photographic materials have been prepared for curation using archival standards and will be transferred to The Environmental and Historical Museum of Hilton Head Island as soon as the conservation of specimens is completed.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric ceramics were classified using common coastal South Carolina types (DePratter 1979; Trinkley 1983). The temporal, cultural, and typological classification of the historic remains followed Noel Hume (1969), Miller (1980), Price (1979), and South (1977).

Results

These investigations identified a total of 74 archaeological sites during this second phase of investigations. Eight of these represent sites not previously identified by Lepionka, while the remainder represent loci previously identified. Two of Lepionka's sites, however, could not be precisely relocated during these investigation. Of these 74 sites currently identified for this second phase of survey on Spring Island, we are recommending that 29 be considered eligible for inclusion on the National Register of Historic Sites. This will bring the total number of sites known for Spring Island to 88, 35 of which either are or will be recommended as eligible.

Excluding the work previously conducted on Spring Island (see Trinkley 1989), this current work has identified a total of 20 shell middens which may be classified as Type 1 sites. That is, they represent fairly small, thin scatters of isolated midden immediately adjacent to the marsh. Of these 20 sites, six are recommended as eligible for inclusion in the National Register of Historic Places. These sites are 38BU724 (Deptford and Irene(, 38BU727 (Deptford), 38BU730 (Deptford), 38BU744 (Deptford), 38BU772 (Deptford), and 38BU1219 (temporal affiliation unknown). Previous work on Spring Island has identified three additional Type 1 sites, one of which (38BU1211) is eligible for the National Register.

Type 2 sites consist of larger, more discrete heaps of shell found adjacent to the marsh or a major slough. These investigations have identified a total of seven such sites: 38BU2 (Stallings/Deptford), 38BU306 (Irene), 38BU728 (Deptford), 38BU729 (temporal affiliation unknown), 38BU776 (Deptford), 38BU789 (St.

Catherines), and 38BU797 (St. Catherines and Irene). All of these sites are recommended as eligible for inclusion on the National Register. Previous investigations have revealed five Type 2 sites in the first phase of develop, four of which (38BU747, 38BU763, 38BU1210, and 38BU1214) are eligible for the National Register. One of these sites, 38BU747, has recently been excavated (Trinkley 1990).

Type 3 sites consist of shell middens found inland from the water 200 to 800 feet and may be characterized as "inland," in the sense that they are not directly oriented to a single, specific marsh or slough. A total of 21 such sites were identified in this current study, six of which are recommended as eligible for inclusion on the National Register (38BU726 - Deptford, 38BU742 - Deptford and St. Catherines, 38BU743 - Deptford, Mount Pleasant, and St. Catherines, 38BU751 - St. Catherines, 38BU753 - Stallings, Deptford, and Savannah, and 38BU758 - Deptford and St. Catherines. The previous work on the Phase 1 tract identified six such sites, but none possessed sufficient integrity to be considered eligible for the National Register.

This work has also identified a fourth class of sites, which lack any evidence of shell midden deposits. Only one such site was identified (38BU1222) and it does not appear to be eligible for the National Register because of extensive damage.

In addition to these prehistoric sites, Chicora has also identified a series of 22 sites which evidence postbellum (probably tenant) occupation. One similar site (38BU793) was previously recorded in the Phase 1 survey and found to be eligible for inclusion on the National Register. Of the 22 sites currently found, five are considered eligible for the National Register. These sites include 38BU777, 38BU803/1213, and 38BU1212. In addition, two tenant sites are considered eligible because of their prehistoric components (38BU753 and 38BU758).

A series of six plantation complex sites have been identified during this most recent survey. They include 38BU1 (Edward's plantation complex and two associated slave rows), 38BU5 (an eighteenth century plantation settlement and a nineteenth century slave row), 38BU740 (an eighteenth century settlement), 38BU741 (an eighteenth century settlement), 38BU773 (a late eighteenth, early nineteenth century slave row), and 38BU791 (a nineteenth century slave row). All of these sites except 38BU741 are recommended as eligible for inclusion on the National Register. In addition, two isolated structures (38BU763D and 38BU1207) were identified during the Phase 1 survey, but are not considered eligible.

Finally, 38BU3 represents the Copp house site, constructed in the mid-1920s. This site will be recommended as eligible for inclusion in the National Register, although we recognize that the archaeological remains have been seriously damaged by structural

demolition. The final site, 38BU6, represents a Black cemetery which may have antebellum origins. This site is recommended as eligible for inclusion on the National Register because of the data the human remains at the site could contribute to dietary studies, health and disease research, and forensic studies.

All of these sites will be discussed fully in our final report on this project. It is, however, appropriate to briefly discuss the issue of data redundancy. There are a number of prehistoric sites recommended as eligible which have the potential to yield essentially similar information. While the eligibility of all of these sites will be documented, we believe that either green spacing or data recovery should be conducted at only a sample. This sample should be subdivided into the different types of sites, and within each type at <u>least</u> two sites from each time period should be either preserved or fully investigated. Table 1 offers a suggested prioritization of sites, based on site integrity and expected research potential.

Table 1.
Research Priorities of Prehistoric Sites on Spring Island

	<u>Type 1 Sites</u>
First Priority:	38BU744 (Deptford)
	38BU1211 (unknown)
Second Priority:	38BU724 (Deptford/Irene)
	38BU772 (Deptford)
	38BU1219 (unknown)
Third Priority:	38BU727 (Deptford)
	38BU730 (Deptford)
	<u>Type 2 Sites</u>
First Priority:	38BU2 (Stallings/Deptford)
	38BU306 (Irene)
	38BU776 (Deptford)
	38BU789 (St. Catherines)
	38BU1214 (Deptford)
Second Priority:	38BU728 (Deptford)
	38BU729 (unknown)
	38BU797 (St. Catherines/Irene)
	38BU763 (Stallings/Deptford/St. Catherines)
	38BU1210 (Deptford)
	<u>Type 3 Sites</u>
First Priority:	38BU743 (Deptford, Mt. Pleasant, St. Catherines)
	38BU758 (Deptford/St. Catherines)
Second Priority:	38BU726 (Deptford)
	38BU742 (Deptford/St. Catherines)
	38BU751 (St. Catherines)
	38BU753 (Stallings/Deptford/Savannah)

Summary and Recommendations

As a result of the archaeological survey of the remaining 3300 acres on Spring Island, 74 archaeological sites were defined. Sixty-five of these sites had been previously identified by Lepionka, although this current study has resulted in major revisions of site boundaries and reassessments of site integrity and significance. A total of 29 archaeological sites are recommended as eligible for inclusion on the National Register of Historic Places.

It may be possible to green space a number of these sites. This approach is recognized as an appropriate, and often cost-effective mitigation measure for archaeological site conservation. Such green spacing, however, must ensure the permanent protection and integrity of the archaeological data. Six recommendations are offered if green spacing is to be considered. These provisions, however, are subject to the review and approval of the State Historic Preservation Office.

1. All site areas are to be blocked out in the field with a buffer sufficient to ensure complete protection of the remains.

2. All clearing within the areas must be conducted by hand. No heavy equipment may be used and all cut vegetation should be removed from the site area.

3. The areas must continue to be clearly defined during all phases of construction. No equipment will be allowed in these areas, or be allowed to use the areas as turn-arounds. The areas will not be used to stockpile supplies or be otherwise disturbed. All personnel, including contractor's personnel, should be strictly forbidden from entering the areas.

4. Any landscaping in the areas will be conducted by land and ground disturbance must be limited to the upper 0.2 foot of soil. No utilities, including sprinkler lines or shallow electrical cables will be placed through the areas.

5. Callawassie Development Corporation must develop a historic easement or protective covenant protecting those areas set aside in green spacing and this protection must be in perpetuity.

6. Appropriate security must be provided to ensure that no one digs or otherwise disturbs the various sites.

Several of the sites, however, are unsuitable for green spacing. In particular, while the archaeological components of

38BU1 may be green spaced, the tabby ruins are in need of immediate preservation. Green spacing, without this additional step, is equivalent to demolition through neglect. In addition, green spacing the standing tenant structures without the preparation of detailed architectural drawings, given the deteriorated condition of the dwellings, will not ensure the long term preservation of the architectural information these structures contain.

Recommendations regarding data recovery will be discussed with each specific site in the final report. Any data recovery at the sites will require a detailed mitigation plan to be submitted to the State Historic Preservation Office for their review and approval. In general, however, it will be important to investigate several areas within any of the sites to ensure that a representative sample has been obtained. In addition, it is likely that artifacts will be uncommon in the middens themselves. The major thrust of the data recovery within the middens should be the collection of shellfish remains from contexts suitable for specialized analysis. Such work should include investigation of seasonality, habitat reconstruction, evidence of selective pressures, and dietary contribution. It is essential that both midden and non-midden areas be equally investigated in order to balance subsistence data with settlement information. The non-midden areas are also more likely to produce temporally sensitive artifacts.

Finally, we recommend that sites which are judged to be eligible for inclusion on the National Register be carefully protected until such time as final development plans allow decisions regarding either green spacing or data recovery to be made. While passive land use activities may continue with little or no additional damage to the sites, active land use, such as agriculture, is likely to have a negative impact on the sites.

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